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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,704	11/30/2001	Harm Sluiman	CA920010006US1	6671

7590

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EXAMINER

CHEN, CHONGSHAN

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/998,704	Applicant(s) SLUIMAN, HARM	
	Examiner Chongshan Chen	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 20-22 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-12 and 20-22 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is responsive to Election filed on June 16, 2005. Claims 1-12 and 20-22 are pending in this Office Action.

#### ***Claim Objections***

2. Claim 7 recites "A storage system in at least one database catalog". It is unclear how could a storage system is in a database catalog. It is the database catalog stored in a storage system. Therefore, should the preamble read "At least one database catalog in a storage system"? Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-11 and 20-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### **MPEP 2106 IV. B.2. (b)**

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

Regarding claim 1, in view of the above cited MPEP section, it is not statutory because it merely recites a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts. The use of a computer has not been indicated.

Regarding claim 7, all the claimed elements or features are not necessarily implemented in hardware, they could be on a piece of paper. Therefore, it is rejected under 101 as not being tangible.

Claims 11 and 20 are rejected on grounds corresponding to the reasons given above for claim 7.

#### *Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 12 recites "A computer readable medium". However, the specification does not support this limitation. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2162

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-5, 7-12 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergamaschi et al. (hereinafter “Bergamaschi”, “Object Wrapper: an object-oriented interface for relational database”, Bergamaschi, S.; Garuti, A.; Sartori, C.; Venuta, A.; EUROMICRO 97. 'New Frontiers of Information Technology', Proceedings of the 23rd EUROMICRO Conference 1-4 Sept. 1997 Page(s):41 – 46 Digital Object Identifier 10.1109/EURMIC.1997.617214).

As per claim 1, Bergamaschi discloses a schema for storing meta data that describes at least one relational database comprising:

at least one abstract class for defining at least one data type of at least one member, said abstract class including (Bergamaschi, page 44-46, “ApplicationData” class, “Select” class):

at least one property for indicating at least one generic Structured Query Language data type for said member (Bergamaschi, page 44-46);

at least one property for indicating at least one database-specific data type name for said member (Bergamaschi, page 44-46); and

at least one method for constructing at least one object instantiated from at least one class derived from said abstract class (Bergamaschi, page 44-46, createObject function).

As per claim 2, Bergamaschi teaches all the claimed subject matters as discussed in claim1, and further teaches wherein said abstract class is a first abstract class, further comprising a second abstract class for describing a user defined data type, said second abstract class derived from said first abstract class, said second abstract class including: at least one property for indicating whether an object of at least one class derived from said second abstract class is

instantiable; and at least one property for indicating whether said class derived from said second abstract class is final (Bergamaschi, page 44-46).

As per claim 3, Bergamaschi teaches all the claimed subject matters as discussed in claim 1, and further teaches wherein said abstract class further comprises at least one property for indicating at least one default value for said type of said member (Bergamaschi, page 44-46, default construction).

As per claim 4, Bergamaschi teaches all the claimed subject matters as discussed in claim 1, and further teaches at least one property for indicating at least one mapping of said database-specific data type name to at least one Java Database Connectivity data type (Bergamaschi, page 41-43).

As per claim 5, Bergamaschi teaches all the claimed subject matters as discussed in claim 1, and further teaches said schema is described using the Unified Modeling Language. (Bergamaschi, page 44, Figure 2 & 3).

Claims 7-12 and 20-22 are rejected on grounds corresponding to the reasons given above for claims 1-4.

### *Claim Rejections - 35 USC § 103*

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergamaschi et al. (hereinafter “Bergamaschi”, “Object Wrapper: an object-oriented interface for relational database”, Bergamaschi, S.; Garuti, A.; Sartori, C.; Venuta, A.; EUROMICRO 97. 'New Frontiers of Information Technology', Proceedings of the 23rd EUROMICRO Conference 1-4 Sept. 1997 Page(s):41 – 46 Digital Object Identifier 10.1109/EURMIC.1997.617214) in view of “XML Metadata Interchange (XMI)” (hereinafter “XMI”, <http://www.oasis-open.org/cover/xmi.html>).

As per claim 6, Bergamaschi teaches all the claimed subject matters as discussed in claim 1, except for explicitly disclosing a serialized stream of meta data in the Extensible Markup Language Meta data Interchange (XMI) format where said meta data is stored according to the schema of claim 1. XMI teaches a serialized stream of meta data in the Extensible Markup Language Meta data Interchange (XMI) format where said meta data is stored according to the schema of claim 1 (XMI, page 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the schema of Bergamaschi by incorporating the Extensible Markup Language Meta data Interchange format as disclosed by XMI. The motivation being to use XMI in exchanging data warehouse metadata.

### *Response to Arguments*

12. Applicant's arguments with respect to claims 1-12 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

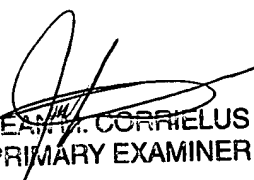
*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571) 272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen  
September 3, 2005

  
JEAN M. CORRIELLUS  
PRIMARY EXAMINER